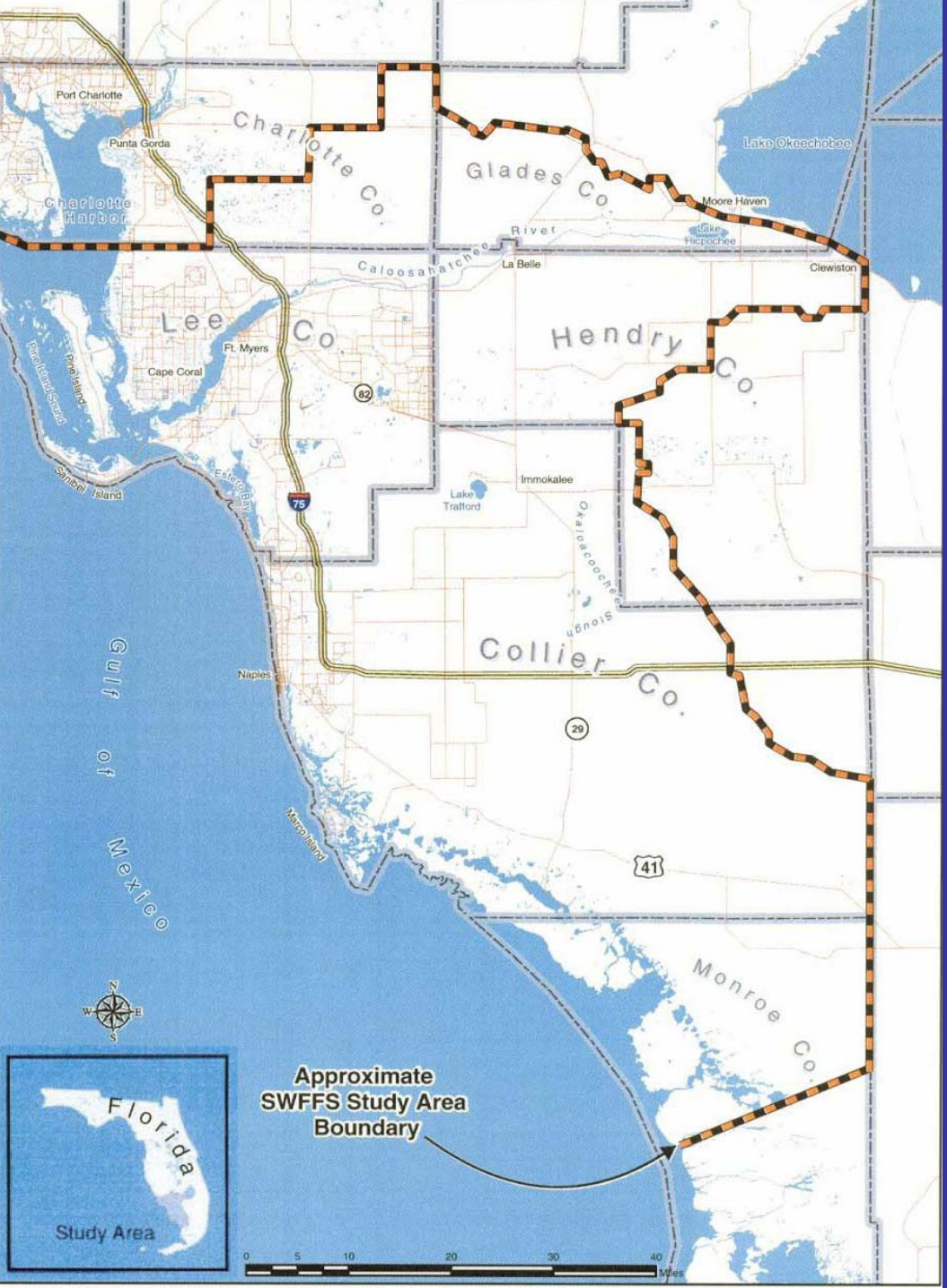
Southwest Florida Feasibility Study

Water Resources Advisory Commission

September 7, 2006

US Army Corps of Engineers ®
Jacksonville District

South Florida Water Management District



Study Area Map

- Encompasses approximately 4,300 mi^2
- Includes all of Lee County, most of Collier and Hendry Counties, and portions of Charlotte, Glades, and Monroe counties
- Northern boundary is the northern drainage extent of the Caloosahatchee River basin
- Eastern boundary is the drainage divide between the Big Cypress Swamp and the Everglades system

Authority

- Section 309(l) of WRDA 1992 – Birth of the Restudy
- Section 528 of WRDA 1996 – Continuing studies needed to complete the restoration of the C&SF Project
- WRDA 2000 - SWFFS was recommended in the 1999 Comprehensive Everglades Restoration Plan

Study Background

Southwest Florida Feasibility Study (SWFFS) was one of the recommendations resulting from the Restudy…

- The SWFFS is a comprehensive review of the restoration needs of all of the watersheds in the Southwest Florida region, that weren't addressed in the Restudy.
- Yellow Book: "The Southwest Florida Feasibility Study will … provide a framework to address the health of aquatic ecosystems; water flows; water quality (including appropriate pollution reduction targets), water supply; flood protection, wildlife, and biological diversity and natural habitat."

Project Purposes

SWFFS was recommended by the Yellow Book as a comprehensive watershed study… specific project purposes include:

- **Health of Aquatic Ecosystems**
- **Water Flows**
- **Water Quality** (including appropriate pollution reduction targets)
- **Water Supply** (Lower West Coast Water Supply Plan)
- **Flood Damage Reduction** (Residual)
- **Wildlife and Biological Diversity**
- **Natural Habitat**
- **Recreation** (Opportunity)

Planning Goals & Objectives

Goal: Restore Ecological Values

1. Improve, restore, and protect habitat quality and heterogeneity, and natural biodiversity in freshwater, upland, estuarine, and marine ecosystems within the Study Area.

2. Improve quantity, quality, timing, and distribution of freshwater flows to estuaries and wetlands within the Study Area (except for the components being addressed by the C-43 Basin Storage Reservoir Project and the Picayune Strand Restoration Project).

3. Restore and/or improve surface and ground water quality conditions within the Study Area.

4. Protect, restore, and improve habitat for listed species within the Study Area.

Goal: Maintain Economic Values and Social Well-Being

5. Maintain or improve sustainability of economic and natural resources within the Study Area.

Planning Constraints

- Maintain availability of water supply within the Study Area at current (Dec. 2000) levels;
- Maintain flood protection levels of service at current (Dec. 2000) levels;
- Maintain existing navigation;
- Do not contribute to the degradation of water quality in the Study Area; and
- Avoid adverse impacts to listed species.

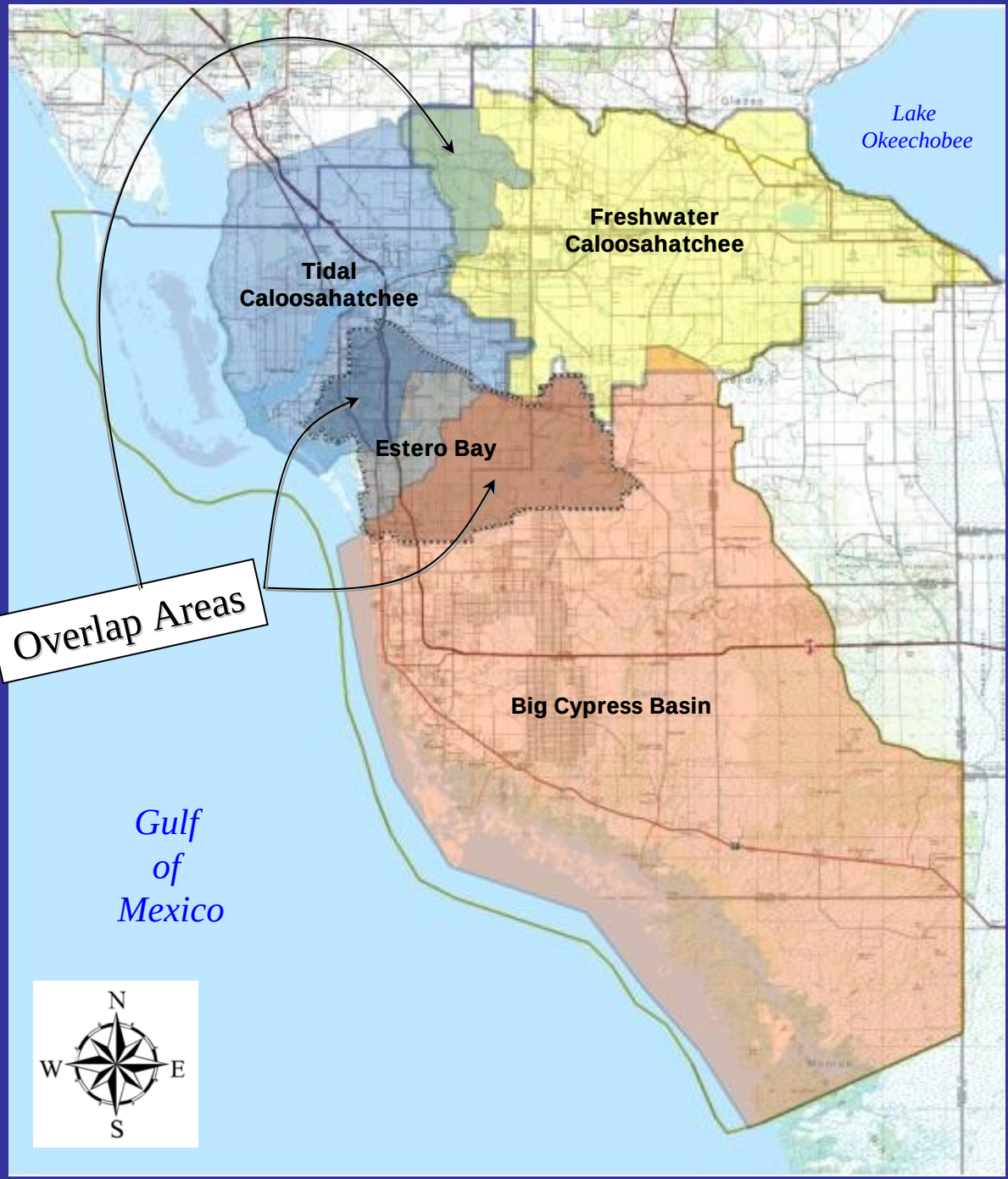
Watersheds

Freshwater Caloosahatchee River Basin (FCRB)

Tidal Caloosahatchee River Basin (TCRB)

Estero Bay (EB)

Big Cypress Basin (BCB)

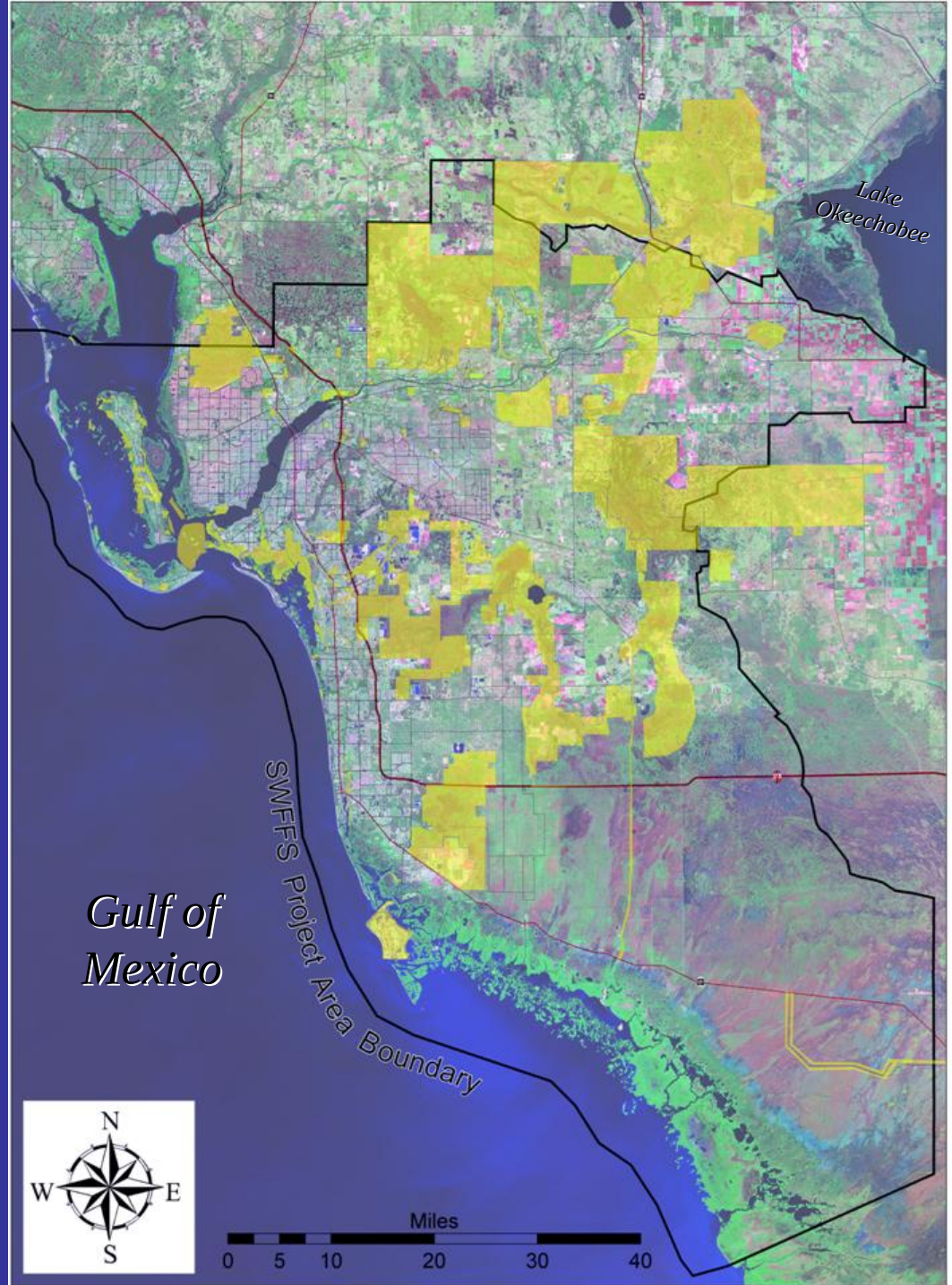


Recent Activities

- Feasibility Scoping Meeting was held Feb 06
- Plan Formulation Workshop was held March 06 with Corps of Engineers Washington and South Atlantic Division to discuss Plan Formulation methodology for the four project basins.

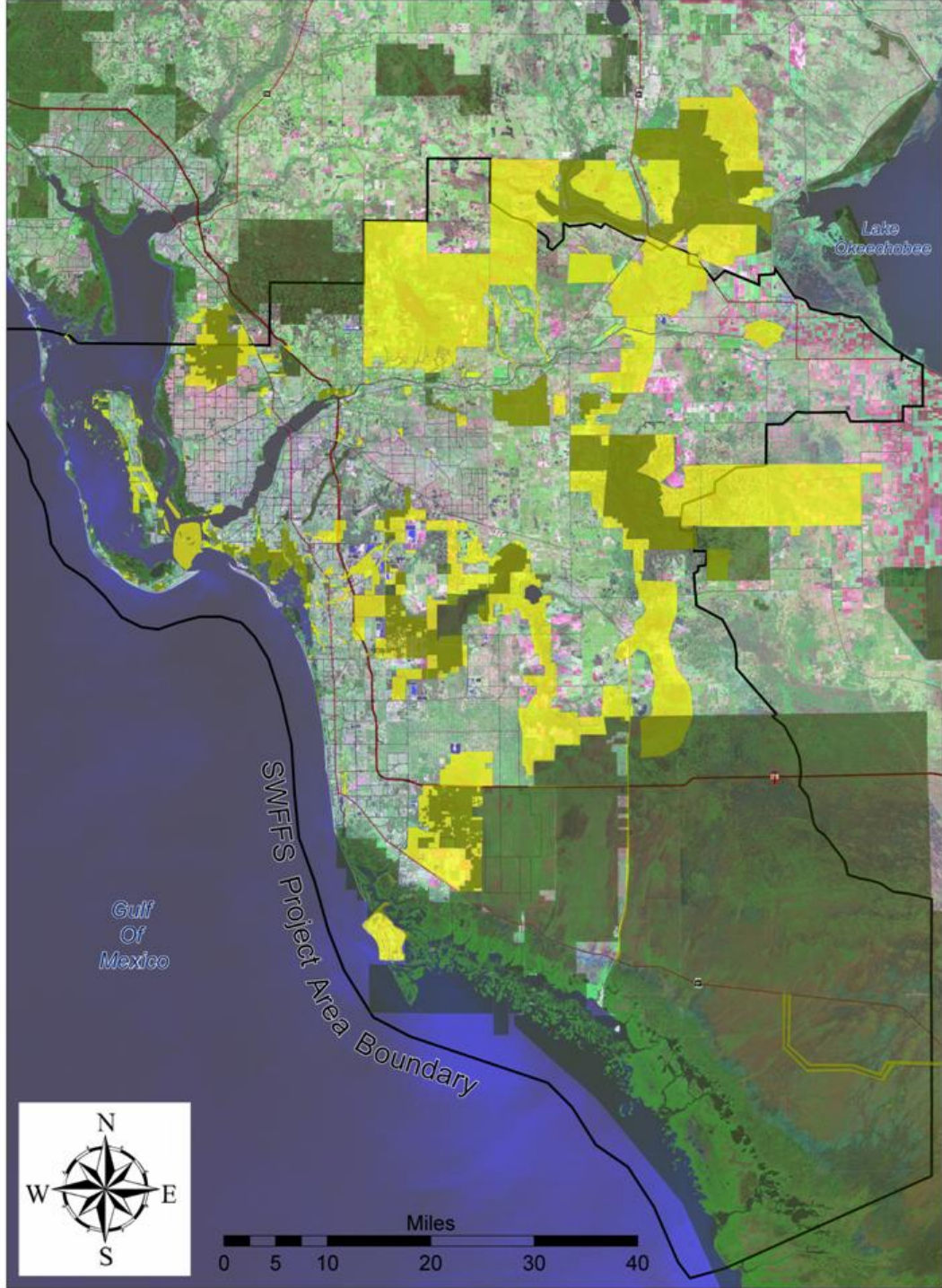
Map of Preliminary Alternatives

- Preliminary Alternative Footprints highlighted in Yellow



Map of Preliminary Alternatives overlain on Publicly Owned Lands

- Preliminary Alternative Footprints highlighted in Yellow
- Publicly Owned, Managed Areas highlighted in Dark Green



Project Accomplishments

- Predevelopment vegetation maps completed
- Regional Simulation Model nearing completion
- Four Sub-regional hydrologic models
- 2000 land use map completed
- 2050 demand projections and land use map completed
- Water quality assessment data completed, currently identifying performance measures
- Ecological - estuarine performance measures and targets identified
- Hydrologic- identified stages and flows

Critical Milestones

Alternative Formulation Briefing	May 07
Draft Feasibility Report	Mar 08
Public Comment on Draft Report	Mar 08–Apr08
Final Feasibility Report	Jul 08
Record of Decision	Oct 08

Questions?